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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,474	10/11/2006	Bertrand Thisselin	288636US0PCT	9370

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EXAMINER	
HUFTY, JOHN PAGE	

ART UNIT	PAPER NUMBER
3747	

NOTIFICATION DATE	DELIVERY MODE
05/14/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/573,474	THISSELIN, BERTRAND	
	Examiner	Art Unit	
	J.PAGE HUFTY	3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6 and 11-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 11-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/14/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey U.S. Patent 6,484,741.

Regarding applicant's newly amended subject matter hermetic is commonly defined as "air tight". One of ordinary skill in the art of fuel systems naturally designs fuel systems in a manner that is hermetic to avoid fuel emission leakage and also leakage of fuel itself.

Therefore this feature is considered to be obvious to one with ordinary skill in the art.

Regarding applicant's assertion that the teaching of Benjey is not relevant because the composite

conjunction conduit of Benjey is used for vapor instead of liquid fuel, it is the position of the examiner that the subject matter of applicant's claims is the result of one with ordinary skill in the art combining prior art elements found in Benjey, according to known methods taught in Benjey that yields a predictable result.

Regarding applicant's assertion that Benjey does not address the elevated temperature as claimed by applicant examiner notes that fuel vapor is necessarily at an elevated temperature or "hot".

Further it is the position of the examiner that applicant's subject matter is obvious as it uses known techniques as taught in Benjey to improve a similar device (fuel tank vapor composite conjunction conduit-fuel tank fuel composite conjunction conduit).

Therefore because of these rationales and further because of the natural progression of adapting the teachings of Benjey to the other naturally flowing

applications or devices in the art of fuel systems the subject matter as set forth by applicant is considered to be obvious to one with ordinary skill in the art of fuel systems.

Applicant's claims are below with relevant citations.

Claim 1 (Currently Amended): A system for supplying an internal combustion engine with a liquid fuel, comprising a tank, a pipe for the circulation of hot fuel between the engine and the tank and at least one sealed composite junction conduit for joining the pipe to the tank **(fig. 1)**,

wherein the composite junction conduit comprises at least two hollow components each based on a different plastic, the said components being mechanically attached to each other and in communication with each other and include, between them, an overmolded hermetic seal **(fig. 1, claim 10, column 2 line 10-34, column 3 line 59+)**.

Claim 3 (Currently Amended): The system according to Claim 1, wherein one of the two hollow components includes a nozzle that is engaged in a socket of the other component and in that the socket is hermetically coupled to a tank and the nozzle is hermetically coupled to a hose **(fig. 1 sealing is inherent and an obvious necessity)**.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey as applied to claim 1 in view of Muto.

To the extent that Benjey does not expressly define the catching element as set forth in applicant's claim Muto teaches this for improved sealing.

Therefore it would have been obvious to one of ordinary skill in the art of fuel systems to combine the disclosure of Benjey with the teaching of Muto for the benefit of improved sealing. Applicant's claims are below with relevant citations.

Claim 2: The system according to Claim 1, wherein the two hollow components are mechanically attached by means of a catching element that forms part of one of the components and is embedded in the constituent plastic of the other component **(Muto: fig. 3a and 5, feature 34A and 36)**.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey as applied to claim 1 above in view of Matsuoka U.S. Patent 5,643,997.

To the extent that Benjey does not expressly set forth the olefin material of applicant's claims this subject matter is obvious to one of ordinary skill given the disclosure of HDPE found in Benjey, and the teaching of Matsuoka: column 2 line 48+, column 5 line 59+

Claim 4: The system according to Claim 3, wherein the plastic of the socket is selected from olefin (co)polymers, the plastic of the nozzle is selected from lactam-derived (co)polymers, polyamide resins and polyacetals and the seal is made of a elastomer selected from nitrils and fluoroelastomers **(Benjey: claim 12-14)**.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey as applied to claim 1 above in view of Wilson U.S. Patent 5,375,629.

Regarding the polyoxymethylen subject matter of applicant's claims this is considered to be obvious to one of ordinary skill in the art given the disclosure Benjey claim 13 and the teaching of Wilson column 1 line 13-22.

Claim 5: The system according to Claim 4, wherein the plastic of the nozzle is polyoxymethylen (POM).

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey.

To the extent that Benjey does not expressly disclose the metal disk of applicant's claims this is considered to be obvious to one of ordinary skill given the teaching of Benjey, figure 1 feature 46.

Claim 6: The system according to Claim 1, wherein a metal disc is inserted between the two components.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey.

To the extent that Benjey does not expressly disclose the like material subject matter of applicant's claims this is considered to be a natural and obvious choice of materials to one with ordinary skill in the art.

15. (New) The system according to claim 1, wherein one of said at least two hollow components is made from the same plastic as the tank, and another of said at least two hollow components is made from the same plastic as the pipe.

Claims 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benjey as applied to claim 1 above, and further in view of Malecek U.S. Patent 5,611,392.

To the extent that Benjey does not expressly disclose the hot fuel subject matter of applicant's claims Malecek teaches that this subject matter as conventionally known and understood as typical operating conditions in an IC Engine.

Therefore the subject matter of applicant's claims is considered to be obvious to one with ordinary skill in the art.

11. (New) The system according to claim 1, further comprising hot fuel present in pipe and in the at least one sealed composite junction conduit.
12. (New) The system according to claim 11, wherein the hot fuel has a temperature greater than 100 °C.

13. (New) The system according to claim 11, wherein the hot fuel has a temperature greater than 120 °C.

14. (New) The system according to claim 11, wherein said hot fuel present in the pipe and the at least one sealed composite junction conduit is diesel fuel.

16. (New) The system according to claim 11, wherein one of said at least two hollow components is made from the same plastic as the tank, and another of said at least two hollow components is made from the same plastic as the pipe **(natural and obvious choice of materials to one with ordinary skill in the art)**.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J.PAGE HUFTY whose telephone number is (571)272-9966. The examiner can normally be reached on 9:00 am - 5:00pm, Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. Page Hufty/
Examiner, Art Unit 3747

/Stephen K. Cronin/
Supervisory Patent Examiner, Art Unit 3747